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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/536,986

03/17/2006

Hideyuki Nishio

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2292 7590 06/20/2008  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

HEINCER, LIAM J

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

06/20/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/536,986	<b>Applicant(s)</b> NISHIO ET AL.	
	<b>Examiner</b> Liam J. Heincer	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al. (US Pat. 5,968,681) in view of Lascaud et al. (WO 01/084659) and Ohtsuka et al. (US Pat. 5,840,809). Note: US Publication US 2003/0108799 is being used as an English language equivalent of WO 01/084659 and all references will be directed towards the US document.

Considering Claim 1: Miura et al. teaches a process for producing a polyether polymer composition (1:5-10) comprising forming a slurry comprising an organic solvent and a polyether polymer dispersed therein (17:64-18:6); and removing the organic solvent from the slurry (18:7-10).

Miura et al. does not teach adding an antioxidant to the slurry. However, Lascaud et al. teaches adding a hindered amine antioxidant to a polyether composition (¶0054). Miura et al. and Lascaud et al. are combinable as they are concerned with the same field of endeavor, namely polyether compositions. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have added an antioxidant to the composition of Miura et al. as in Lascaud et al., and the motivation to do so would have been, as Lascaud et al. suggests, to control tree forming (¶0042).

Miura et al. does not teach adding a stabilizer to the composition. However, Ohtsuka et al. teaches adding a hindered phenol stabilizer or a phosphorous stabilizer to a epoxy functional polymer prior to solvent removal (9:1-47). Miura et al. and Ohtsuka et al. are combinable as they are concerned with the same field of endeavor, namely formation of epoxy functional polymers through a solvent removal process. It would have been obvious to a person having ordinary skill in the art at the time of invention to have added the stabilizer of Ohtsuka et al. in the process of Miura et al., and the motivation to do so would have been, as Ohtsuka et al. suggests, to improve the thermal stability of the polymer during processing (9:41-47).

Considering Claim 4: Miura et al. teaches the organic solvent as being n-hexane (18:2).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al. (US Pat. 5,968,681) in view of Lascaud et al. (WO 01/084659) and Ohtsuka et al. (US Pat. 5,840,809) as applied to claim 1 above, and further in view of Bhatia et al. (JP 08-188653).

Considering Claim 2: Miura et al., Lascaud et al., and Ohtsuka et al. collectively teach the method of claim 1.

Miura et al. does not teach the additive as being in solution. However, Bhatia et al. teaches adding additives in solution to synthetic polymers (PAJ Abstract). Miura et al. and Bhatia et al. et al. are combinable as they are concerned with the same field of endeavor, namely synthetic polymers. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have added the additive in solution in the process of Miura et al. as in Bhatia et al., and the motivation to do so would have been, as Bhatia et al. suggests, to highly disperse the additive (PAJ Abstract).

Claims 5, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al. (US Pat. 5,968,681) in view of Lascaud et al. (WO 01/084659) and Ohtsuka et al. (US Pat. 5,840,809).

Considering Claims 5 and 8: Miura et al. teaches polyether polymer composition (1:5-10) obtainable through a process comprising forming a slurry comprising an organic

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solvent and a polyether polymer dispersed therein (17:64-18:6); and removing the organic solvent from the slurry (18:7-10).

Miura et al. does not teach an antioxidant as being in the slurry. However, Lascaud et al. teaches adding a hindered amine antioxidant to a polyether composition (¶0054). Miura et al. and Lascaud et al. are combinable as they are concerned with the same field of endeavor, namely polyether compositions. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have added an antioxidant to the composition of Miura et al. as in Lascaud et al., and the motivation to do so would have been, as Lascaud et al. suggests, to control tree forming (¶0042).

Miura et al. does not teach adding a stabilizer to the composition. However, Ohtsuka et al. teaches adding a hindered phenol stabilizer or a phosphorous stabilizer to a epoxy functional polymer prior to solvent removal (9:1-47). Miura et al. and Ohtsuka et al. are combinable as they are concerned with the same field of endeavor, namely formation of epoxy functional polymers through a solvent removal process. It would have been obvious to a person having ordinary skill in the art at the time of invention to have added the stabilizer of Ohtsuka et al. in the process of Miura et al., and the motivation to do so would have been, as Ohtsuka et al. suggests, to improve the thermal stability of the polymer during processing (9:41-47).

Considering Claim 11: Miura et al. teaches making a solid electrolyte (1:56-57) comprising the polyether composition (2:56-57) and an electrolyte salt compound which is soluble in the polyether polymer composition (2:58-59).

Claims 6, 7, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al. (US Pat. 5,968,681) in view of Lascaud et al. (WO 01/084659) and Ohtsuka et al. (US Pat. 5,840,809).

Considering Claims 6, 7, and 10: Miura et al. teaches polyether polymer composition (1:5-10) obtainable through a process comprising forming a slurry comprising an organic solvent and a polyether polymer dispersed therein (17:64-18:6); and removing the organic solvent from the slurry (18:7-10).

Miura et al. does not teach an antioxidant as being in the slurry. However, Lascaud et al. teaches adding a hindered amine antioxidant to a polyether composition (¶0054). Miura et al. and Lascaud et al. are combinable as they are concerned with the same field of endeavor, namely polyether compositions. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have added an antioxidant to the composition of Miura et al. as in Lascaud et al., and the motivation to do so would have been, as Lascaud et al. suggests, to control tree forming (¶0042).

Miura et al. does not teach adding a stabilizer to the composition. However, Ohtsuka et al. teaches adding a hindered phenol stabilizer or a phosphorous stabilizer to a epoxy functional polymer prior to solvent removal (9:1-47). Miura et al. and Ohtsuka et al. are combinable as they are concerned with the same field of endeavor, namely formation of epoxy functional polymers through a solvent removal process. It would have been obvious to a person having ordinary skill in the art at the time of invention to have added the stabilizer of Ohtsuka et al. in the process of Miura et al., and the motivation to do so would have been, as Ohtsuka et al. suggests, to improve the thermal stability of the polymer during processing (9:41-47).

The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients and process steps. Therefore, the claimed effects and physical properties, i.e. amount of antioxidant on the surface of the particle, gel content, and amount of stabilizer within the particle would implicitly be achieved by a process using the claimed ingredients and process steps. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Considering Claim 12: Miura et al. teaches making a solid electrolyte (1:56-57) comprising the polyether composition (2:56-57) and an electrolyte salt compound which is soluble in the polyether polymer composition (2:58-59).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-8 and 10-12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liam J. Heincer whose telephone number is 571-270-3297. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARK EASHOO/

LJH

Supervisory Patent Examiner, Art Unit 1796

June 9, 2008

17-Jun-08